

Preliminary Remarks:

The standing requirement for restriction and election of claims has now been made final. In response to the requirement for restriction, applicants previously elected apparatus claim 1- 23 (Group I) and withdrew method claims 24- 25 and 28- 34 (Group II) under traversal. The Examiner has now made the restriction requirement final.

Applicants hereby withdraw claims 24- 25 and 28- 34 without traverse. However, applicants reserve their right to file a divisional application directed to these withdrawn method claims 24-25 and 28- 34 prior to the issuance of a patent out of the present application.

The Examiner has rejected claim 16, under 35 USC112, first paragraph, stating the specification does not provide enablement for "rinsing the contacting electrode continuously or intermittently".

A reading of the specification: at page 10, at the paragraph beginning at line 15; at page 17, at the paragraph beginning at line 29 and extending onto the next page; and at page 19, the paragraph beginning at line 20, support the language of claim 16. These paragraphs recite, respectively:

If it is not possible to reliably prevent the processing liquid from getting into contact with the contacting electrodes, processing liquid that has exited the electrolysis region and reached the contacting electrodes **may be removed by providing continuous or intermittent washing or spraying**. In order to efficiently rinse the processing liquid off the contacting electrodes, the work pieces may be transported in a plane that is for example inclined to the horizontal at an angle of at least 5°, of about 70° at most and preferably at about 15°. **Rinse liquid delivered to the contacting electrodes quickly drains off** so that efficient removal of the processing liquid is made possible. **Alternatively, processing liquid that has exited the electrolysis regions can also be removed by air jets, using air knives** for example.

In a first treating step the printed material is transferred into a redactor that usually is a strong reducing agent in an aqueous solution such as sodium boron hydride, an amino borane such as dimethyl amino borane or a hypophosphite. In the reductor, the oxydated noble metal contained in the varnish or the paste is reduced to metallic noble metal, for example to metallic palladium. **After reduction, the strip is fed to a rinsing station where excess reductor is water rinsed. A spray**

sink is preferably utilized for this purpose. Next, a very thin layer of copper (of 0.2 - 0.5 µm thick) is electrolessly deposited onto the activator structures. Copper deposition onto the structures is initiated by the noble metal nuclei formed in the reductor, no copper being deposited onto the non printed areas. A current bath containing formaldehyde as well as tartrate, ethylene diamine tetraacetate or tetrakis-(propane-2-ol-yl)-ethylene diamine may be utilized as the copper bath. **After copper plating, the strip form material is conveyed to a rinsing station** in which excess copper bath is stripped off by spray rinsing with water. [emphasis added]

After the foil strip has been passed through the metal plating device of the invention, **the material is again conducted to a spray sink** in which excess deposition solution **is rinsed off.** Then, the strip material is transferred to a device in which it is contacted with a passivation means that is intended to prevent copper from tarnishing. Prior to winding the strip form foil material onto another storage drum, the material is dried in a drying station. For this purpose, the apparatus utilized may be similar to those used for drying the activator varnish or the activator paste. [emphasis added]

Certainly, rinsing, a rinsing sink, and a rinsing station are explicitly and implicitly disclosed in the specification. These limitations (features) are readily understood by one of ordinary skill in the art.

Apparatus claims 1- 2 and 5- 23 are pending in the present application. In addition, applicants have added new apparatus claims 35- 40 herein below.